

91-105669/15 AKINO T 03.00.89-JP-219951 (+ JP-179586) (28.02.91) C12n-09742 C12r-01/07	D16 (D17) 03.00.89-JP-219951 (+ JP-179586) (28.02.91) C12n-09742 C12r-01/07	AKIN/ 30.07.84 ED 3047-076-A	D(5-C3C)
New beta-mannanase - hydrolyses beta 1,4-D-mannopyranoside bonds of mannan, glucomannan and galactomannan and can be mfd at low cost C91-045455	A new beta-mannanase has the following characteristics; it hydrolyzes the beta-1,4-D-mannopyranoside bonds of mannan, glucomannan, galactomannan and galactoglucomannan unsingularly to generate mainly oligosaccharides; it acts on beta-mannan singularly but does not act on alpha-mannan; it is suited at pH 8-10 and stable at pH 6-10 when heated for 30 mins. at 60 deg.C. while stable up to at 65 deg.C when heated for 30 mins. at pH 6.0; it is inhibited by mercuric chloride, Ag nitrate, (EDTA) Na <sub>2</sub> , urea, dodecyl Na sulphate and dodecyl benzene Na sulphonate; it has an isoelectric pt. at 5.3-5.4, when measured by chromatofocusing; and it is 37,000 (+/-) 3,000 in mol. wt. when measured by gel filtration. The beta-mannanase is mfd. by culturing a beta-mannanase-generative microbe belonging to Bacillus having its suitable pH at alkalinity to allow it to generate the beta-mannanase in the culture soin. and collecting it. USE/ADVANTAGE - The beta-mannanase is mfd. at low cost. (Spp Dwg.No.0/0)		